10/537300

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A cryptographic method during which an integer division of the type $q = a$ div b and/or a modular reduction of the type $r = a$ mod b is performed, ~~with~~ where q is a quotient, a is a number ~~of~~ containing m bits, b is a number ~~of~~ containing n bits, with n less than or equal to m and b_{n-1} is non zero, b_{n-1} being the most significant bit of the number b, ~~characterised in that the number a is masked~~ comprising the steps of masking the number a by a random number ρ before performing the integer division and/or the modular reduction , and generating encrypted or decrypted data in accordance with the results of the division and/or modular reduction.

2. (Currently Amended) A method according to Claim 1, ~~during which~~ wherein, in order to mask the number a, b times the random number ρ ($a <- a + b*\rho$) is added to the number a.

3. (Currently Amended) A method according to Claim 1 ~~or Claim 2 in which~~ wherein, after having performed an integer division, the contribution made by the random number ρ is taken away from the result of the integer division.

4. (Currently Amended) A method according to Claim 3 ~~in combination with Claim 2~~, ~~during which~~ wherein, in order to take away the contribution made by the random number ρ, ~~the~~ said random number ρ is subtracted from the result of the integer division.

5. (Currently Amended) A method according to ~~one of Claims 1 to 4 during which~~ Claim 1, wherein the random number ρ is modified at each implementation of the method.

6. (Currently Amended) A method according to ~~one of Claims 1 to 4 during which~~ Claim 1, wherein the random number ρ is modified after a predetermined number of implementations of the method.

7. (Currently Amended) An electronic component comprising means for implementing a method according to ~~one of the preceding claims the programmed calculation~~ Claim 1, said means comprising ~~in particular several~~ a plurality of registers for storing the numbers a and b.

8. (Currently Amended) A chip card comprising a component according to ~~the preceding claim~~ Claim 7.